

SHOCKEY, LLC

P. O. BOX 2530, WINCHESTER, VA 22604
540.667.7700

January 23, 2006

VIA HAND DELIVERY

Ms. Tina M. Borger, CPPO
Manager/Purchasing Agent
County of Loudoun
1 Harrison Street
Leesburg, VA 20177-7000

Dear Tina:

With this letter, I enclose the following portion of an unsolicited proposal which the Shockey, LLC team (the "Team") plans to submit to Loudoun County pursuant to the Virginia Public-Private Education Facilities and Infrastructure Act of 2002 ("PPEA") and the PPEA Procedures adopted by the County's Board of Supervisors:

- Volume II, which details the Team's plan for financing the project, including proposed financing, cost estimates, estimating methodologies, assumptions and risk factors.

We plan for this section to be part of the Team's proposal, but it is submitted under separate cover because it constitutes what our team considers to be confidential proprietary information. Accordingly, we ask that you agree in advance that all portions of this section will be excluded from public inspection and release, and that the Board will take appropriate action to protect this section. This request is made pursuant to and in accordance with the PPEA, the City's PPEA Procedures, and subdivision 11 of Section 2.2-3705.6 of the Virginia Freedom of Information Act.

Protection of this section of the proposal is necessary because it constitutes (i) confidential proprietary information and (ii) records related to the proposal that, if made public, would adversely affect the financial interest and the bargaining position of both the private entity making the proposal and the Board.

As you will see, each page of information for which protection is sought is marked with an appropriate designation.

Ms. Tina M. Borger
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In any event, we trust that you will maintain confidentiality of these documents until we can reach a mutually satisfactory arrangement.

If the County cannot accommodate this request, we ask that the County use the same rationale for confidentiality that it used when evaluating Shockey's PPEA proposal for Purcellville Fire and Rescue Station. We trust that the County is willing to honor this precedent.

If you have any questions or desire additional information related to this request, please contact me immediately.

Thank you for your prompt attention to this matter.

Sincerely,

A handwritten signature in cursive script, reading "James W. Brinkmeier". The signature is fluid and extends to the right with a long horizontal stroke.

James W. Brinkmeier
Business Development Representative



- a. Provide a description of the project, including conceptual design. Describe the proposed project in sufficient detail so that type and intent of the project, the location and the communities that may be affected are clearly identified.

The proposed expansion plan for the new Adult Detention Center includes the following activities:

- Construct additional inmate housing pods
- Construct new intake/booking area
- Convert the existing intake area for court transfers, to expand medical, and to expand central control
- Convert the existing Magistrates' area for video visitation
- Construct new Magistrates' area
- Expand the facility's administration and staff services areas.

The **current facility**, now under construction will have an operating capacity of **196** beds, including 44 maximum security beds (22 percent) and 152 minimum security beds (78 percent). In addition, the current facility will have 30 beds of special purpose housing, including administrative segregation and medical beds.

The **proposed facility expansion plan** will provide an additional operating capacity of **256** beds, including 64 maximum security beds (20 percent), and 192 medium security beds (75 percent). This adds an additional 123,627 gross square feet of new construction and includes an additional 9,409 gross square feet of renovation.

The **combined /expanded facility** will have a total operating capacity of **460** beds, including 92 maximum security beds (20 percent), 192 medium security beds (42 percent), and 176 minimum security beds (38 percent). In addition, the expanded facility will have **46** beds of special purpose housing, including administrative segregation and medical beds.

The following is an overview of the Expansion Plan for the Loudoun County Adult Detention Center

1. Construct additional inmate housing pods.

- a. Construct a new inmate housing pod, attached to and extending out for the existing facility's General Housing Unit. The new pod will have four separate housing areas. Two of the housing areas will be designed for medium security, each with 24 cells (48 beds) on two levels. Two of the housing areas will be designed for maximum security, each with 32 cells (32 beds) on two levels. *Total: 160 additional beds.*
- b. Construct a new inmate housing pod, attached to and extending out from the existing facility's General Housing Unit. The new pod will have four separate housing areas designed for medium security, each with 24 cells (24 beds) on two levels. *Total: 96 additional beds.*
- c. Each new housing area will have its own outdoor recreation area. *Total: 8 new outdoor recreation areas.*
- d. New circulation corridors will be constructed to connect the new housing pods to the existing housing units.

2. Construct a new intake and booking area.

- a. Construct a new intake and booking area, attached to and extending out from the existing facility's Minimum Security Unit. The new intake and booking area will include 23 single holding cells, a vehicular sallyport, inmate property storage and other intake/booking support spaces.



- b. A portion of the existing outdoor recreation area, the lobby and the visitation space in the Minimum Security Unity will be renovated to provide three group holding cells for the new intake and booking area, and to expand facility administration.
3. *Convert the existing intake area for court transfers, to expand medical and to expand central control.*
 - a. A portion of the existing facility's intake/booking area will be renovated to serve as a court transfer area for staging inmates going to or returning from court.
 - b. A portion of the existing intake/booking area will be renovated to expand the facility's adjacent medical area.
 - c. The facility's central control room will be expanded into an adjacent space in the existing intake/booking area.
4. *Convert the existing Magistrates' area for video visitation.*
 - a. The existing Magistrates' area located off the public lobby will be converted for video visitation.
5. *Construct new Magistrates' area.*
 - a. A new and larger Magistrates' area will be constructed adjacent to the facility's new intake and booking area.
6. *Expand the facility's administration and staff services areas.*
 - a. The existing staff services area will be renovated to expand the facility administration area.
 - b. A new staff services area and secure storage areas will be constructed on the second floor of the new intake and booking area.

DESIGN RATIONALE

The design and construction rationale of the expansion of the Loudoun County Adult Detention Center will be similar to that specified for the facility that is currently under construction. As noted in the original Planning Study, (completed in 2000 that led to the facility that is currently under construction) the following factors hold true for this project:

- In a special meeting of the Commonwealth of Virginia's Board of Corrections held on November 16, 2005 the Board approved the Loudoun County Adult Detention Facility Planning Study which makes the project eligible for state reimbursement for up to 25% of the State approved eligible project costs. At this meeting the Department of Corrections proposed that \$33,558,709 of the total presented project cost budget would be eligible for State reimbursement, provided the final constructed project meets the goals for increased capacity and operational improvements as presented in the planning study and that the final design was approved by the Department of Corrections, and meets the requirements of the 'Standards for Planning, Design, Construction and Reimbursement of Local Correctional Facilities', dated July 1, 1994.

The reimbursement guidelines also allow for a one time appeal at the conclusion of the project should the eligible reimbursable costs of the project increase by more than 10% during the life of the project. The intent of this provision is to address cost increases due to increases in construction cost in excess of the anticipated inflation to the mid-point of construction as presented in the approved Planning Study. Should the eligible reimbursable costs significantly increase as a result of increases in costs of construction (not scope creep) during the design and procurement phase of the project, the County has the option to request additional reimbursement at the 25% rate to cover these costs at the conclusion of the project's construction.



- Detention Center Housing will be:
 - Concrete slab on grade
 - Cells – precast concrete units, load bearing insulated exterior panels (or traditional masonry, whichever is more cost effective)
 - Supplemental framing – precast concrete
 - Roof – precast concrete double-tee plank
 - Masonry walls – Security reinforced concrete masonry, double width insulated where enclosing conditioned space. Cells group-filled solid
- Detention Center Support / Program/ Administration/ Visitation:
 - Concrete slab on grade
 - Exterior walls – double with reinforced insulated concrete masonry, security reinforcing at all inmate occupied areas. Cells grout filled
 - Framing – Steel
 - Roof – Steel joists, metal deck with concrete topping. Security ceilings in inmate areas
 - Partitions – Concrete masonry, solid with security reinforcing surrounding all secured areas.
- Community Custody – Work Release:
 - Concrete slab on grade
 - Exterior Walls – double with reinforced insulated concrete masonry, security reinforcing on all inmate occupied areas. Cells group-filled solid
 - Framing – Steel
 - Roof – Steel joists, metal deck
 - Partitions – Reinforced concrete masonry
- Drainage and Stormwater Management:
 - Stormwater falling inside the designated site will be collected in a storm sewer collection system consisting of properly sized vandal-proof site and area drains and directed to an existing Storm Water Management Pond located northeast of the site on County-owned land. This pond will be modified as required to provide stormwater flow attenuation, detention and water quality enhancement for the majority of all excel runoff generated by development of the complex.
 - Drop inlet grates and frames are to be constructed of heavy-duty ductile iron ASTM A 536 Grade 60-40-18. Grate openings are to be small squares or short slotted openings.
 - Grate is to be secured to inlet with tamper-proof special alloy controlled access triple chrome-plated “intimidator” bolts with all-weather plastic protection caps. Provide one T-wrench key.
 - Units in paved areas are to be capable of supporting H2O load.
 - This facility will also be designed to trap and retain all silt and sediment generated from land disturbing activities during site development.
- Plumbing:
 - No plastic piping of any type will be used above the ground floor slab within the security perimeter of the facility.
- Sanitary:
 - The sanitary system will be completed to serve all fixtures and equipment in the complex and will discharge by gravity to a grinder pump assembly and then to a pumping station, which will connect with existing utilities. A large mesh filtering screen will be located prior to the grinder pump assembly and a mechanism for cleaning the filtering screen and removing the trash / debris will be provided. All horizontal sanitary drains and building



sewers will have cleanouts not more than 50 feet apart and all cleanouts will be inaccessible to inmates and have the cover secured with security screws.

All above floor piping will be cast iron with stainless steel couplings and will be concealed in chases. No piping will be exposed to inmates. Floor drains will be installed in inmate housing areas (dayrooms) and dormitory areas for ease of cleanup and to maintain sanitary conditions. All piping below slab on grade will be Schedule 40 PVC. Each housing unit will have at minimum a 6-inch sewer lateral and sanitary stacks will have a minimum of 6-inches in diameter. Cleanouts will be provided at both the top and bottom of each stack and in horizontal piping at all changes in direction and at intervals not exceeding 50 foot. Sewer main will be sized to accommodate proposed 6-inch laterals, as well as 6-inch laterals for future construction, as shown on the drawings.

Plumbing rough in will be provided for all kitchen equipment. Specialty items include grease trap assembly to be located outside of the kitchen accessible for cleanout.

Floor drains will be provided throughout the facility in group toilet rooms, showers and day rooms to facilitate housekeeping needs. Drains in housing units will be located in the aisle space outside of the cells. At the mezzanine level, open floor drains will be located over the floor drain in the floor below.

■ Stormwater:

- All room drains and downspouts will be collected and run to disposal sites, as dictated by site conditions. All interior rainleader piping will be insulated.
- Drains for outdoor recreation yards will be bottom outlet floor drain units conforming to SAME A 112.21.1 and will be constructed of ductile iron with coated ductile iron top.
- Provide 12 5/8" diameter strainer on top of secured with vandal-proof screws.

■ Domestic Water:

- Domestic water piping will be extended throughout the buildings and be connected to all fixtures and equipment including water heaters. A hot water supply and return system will be run to all fixtures requiring connections. All water piping will be type "L" copper, copper fittings, lead free solder and will be insulated. Water main will be sized to accommodate proposed buildings, as shown in drawings. Valves will be provided at ends of system for ease of future expansion.

■ Water Heaters:

- The water heaters will be water to water storage type heaters fed from the central hot water system. Each housing unit will have an independent water heater to minimize the re-circulation system. The water heaters will be cross-connected to provide hot water to the other housing units in case of failure of one heater.

Booster heaters for continuous 180 degree + and/or hot water steam service will be provided in the Food Preparation and Laundry areas. No such continuous heating requirement is anticipated in the Medical Services area.

■ Plumbing Fixtures:

- All water closets and lavatories for inmate housing and other inmate areas will be stainless steel combo units or separate as required. Anti-flood valves will be included on all cell / dormitory toilets to cut off the water supply if water reaches the toilet rim. Vandal-proof time limiting push-button controls will be [used in] cell and toilet facilities used by inmates.



- Inmate showers will be of secure construction and will have temperature limiting devices inaccessible to inmates. Inmate shower stalls will have vandal-proof heads, time limiting push-button controls and will include a soap dish or soap dispenser. Shower heads will be positioned to confine the water flow to the shower stall.
- For staff and visitor areas, the water closets and lavatories will be institutional grade vitreous china. The staff showers will be precast individual receptors of ceramic tile finish on concrete masonry unit walls.

■ Plumbing Chases:

- Within the secure perimeter, all plumbing chases will be of a walk-in type and will be provided with sufficient lighting and electrical outlets to facilitate facility maintenance. For plumbing chases with access doors located at the housing unit mezzanine level, floor grates will be provided to allow access to all spaces within the chase.

■ Janitorial Closets:

- All housing units will be provided with a janitor closet with a mop sink, mop storage rack / device, floor drain and adequate storage for daily use janitorial supplies. Outside the housing units, sufficient janitor closets will be provided in sufficient quantity to facilitate good housekeeping and will include a mop sink, mop storage rack / device, floor drain and adequate storage for daily use janitorial supplies.

■ Fire Protection:

- All housing units and the Program / Support Building will be protected throughout with an approved automatic, wet type sprinkler system. All fire protection piping within the secure perimeter will be concealed wherever possible, kept flush with and securely fastened to the ceilings and walls. Sprinkler heads in inmate areas will be the quick response institutional type (security grade). All other heads will be standard type in ceilings, and where no ceilings are installed, upright heads will be used.
- No fire pump is anticipated at this time. However, pressure testing will be required to determine the need as the design proves proceeds.

■ Heating Ventilating & Air Conditioning (HVAC):

- The HVAC concept will be one of central plant utilities providing hot and chilled water to each portion of the complex. Ground source heat pumps should also be evaluated as an alternative. The main mechanical room will be located adjacent to Food Service and will house the following major equipment:
 - Boilers, rating, and fuel to be determined (oil or gas);
 - Water cooled chillers;
 - Primary / secondary chilled water pumps;
 - Primary / standby hot water pumps; and
 - Condenser water pumps.

Cooling towers will be located in close proximity to the mechanical room in order to reduce piping cost and will be fenced for security purposes.

The boilers will be provided with outdoor air reset capability and will be sized to satisfy domestic hot water heating requirements.

Housing Units will have constant volume air handling units located on the roof. The number and location of units will vary with housing unit type. Each unit will have a chilled water coil and hot water coil with two-way modulating control valve. Each unit as required to meet the current Virginia Uniform Statewide Building Code requirement will introduce



minimum supply air. It is anticipated that at least 10 cfm of that requirement will be outside air.

Ductwork where exposed will be of sufficient height as to be inaccessible. Grilles, registers, and diffusers will be approved for security use.

Each housing unit will be equipped with an engineered smoke removal system. Prior to the design of the system, the A/E will meet with the appropriate representatives from the Department of Corrections to discuss and review any evolving standards or expectations concerning the performance of the smoke removal system and the "acceptance testing" for the system.

The Program and Support Building will have Central Station Air Handling Units, each equipped with a cooling and heat coil. Two-way modulating valves will control water flow to the coils. Conditioned air will be delivered via a variable air volume distribution system utilizing a series of fan powered terminal units. The area above the ceiling will act as a return air plenum. Outdoor air will be introduced at a rate of 20 cfm per occupant. This includes Holding Cell areas. Supply ductwork will be galvanized sheet metal. Grilles, registers, and diffusers will be commercial grade in all areas except the Medical exam and Holding Cell areas. Security grade grilles, registers, and diffusers will be used in those areas.

HVAC specialty areas include the Medical Wing, Library, Barbershop, and Locker Rooms.

The Medical Wing will be served by a dedicated AHU. Return air will be ducted within. Terminal units will be of the tracking variable air volume type in the Treatment and Dental Operating areas. No air from those areas will be returned (i.e. all air supplied to those spaces will be exhausted via the tracking terminal units). Those spaces may be maintained at negative (or positive if required) pressure versus surrounding spaces to contain (or prevent the intrusion of) germs. All other areas in the Medical Wing will have a traditional variable air volume distribution system with ducted return.

A separate heat recovery, air-handling unit will supply the Locker Rooms. Outdoor air will be supplied at a rate of 0.5 cfm/S.F., and all air will be totally exhausted.

The Program Support Building air handling unit return fans and associated exhaust fans will be incorporated into an engineered smoke removal system. Additional exhaust fans dedicated to the smoke purge operation will be added as required.

Indoor design conditions will be 74 degrees F. in the Summer and 72 degrees F. in the Winter, except in the locker room. Local temperature adjustment within a defined range can be made available in elected areas. In general, temperature adjustment will be from a central computer console(s).

■ Energy Management System:

- A building automation system with energy management capabilities will provide central control of all HVAC functions, as well as demand limiting, lighting control, and similar functions. The system will be capable of expansion to support anticipated development of the site.

■ Electrical Lighting & Power:

- Service to the facility will be 277/480V, three phase, four wire. A pad-mounted transformer will be located adjacent to and enclosed by the security fencing. Parallel sets of copper



conductors will be routed underground from the transformer pad to the main electrical service equipment. The main electrical equipment will be located within a dedicated electrical room. These conductors will be run in 4 inch PVC conduits. Several empty spare conduits will be provided. Routing of the service feeder will be coordinated with future expansion. The cables are cross-linked polyethylene insulated, PVC jacketed. Loads are to be determined as part of the succeeding design process.

The main service equipment will consist of a main switchboard rated at 480 volt, three phase. The switchboard will be sized to accommodate the future loads as determined during the next design phase. The main disconnect will be a fused bolted pressure switch. The feeder devices will be a fused switch type device or molded case circuit breakers, depending upon available fault current from Northern Virginia Electric Cooperative (NOVEC). Power will be distributed to each building and major load area from the switchboard. Panel boards will be located in the general vicinity of the loads they serve. Separate panel boards will be provided for mechanical equipment, kitchen equipment, and other similar loads. Large loads, such as the chiller, will be fed directly from the main switchboard.

Panels serving 120-volt loads will be powered from dry-type step down transformers. These units will have aluminum winding and be rated for 150° C temperature use. Transformers serving panels dedicated to computers and other data processing equipment will be "K" rated to provide a safer and more reliable power source for the non-linear loads.

Branch wiring will be single conductor copper. Insulation will be thermoplastic rated at 600 volts. Specification grade receptacles will be furnished in most areas. Hospital grade devices will be furnished where required. A red faceplate or device will identify outlets on emergency power.

All conduit within the security perimeter will be Rigid Steel or Intermediate Metallic Conduit (IMC) with threaded fittings. Electrical Metallic Tubing (EMT), as allowed by the NEC and the Board of Corrections standards may be used outside of the security perimeter. Within the security perimeter, liquid tight flexible metallic conduit may be utilized, if concealed and in lengths not to exceed four feet, for runs from the junction box to lighting fixtures and for the final connections to motor terminal boxes and other vibrating equipment. All conduit within the security perimeter will be concealed whenever possible. If exposed within the security perimeter, all conduit will be mounted at a minimum height of 12 feet above the finished floor.

■ Electrical Emergency System:

A pad mounted generator will be provided for emergency power. The generator will be housed outdoors in the general vicinity of the main electrical room. Since the facility's electric service is on an interruptible rate, the generator will be sized to power all essential electric loads, including a minimal amount of lighting, ventilation, sufficient kitchen equipment to maintain a 3 meal per inmate per day rate, fire alarm and security systems and enough equipment to sustain operations for a 72 hour period. The power source for the generator (diesel, natural gas) will be elevated and selected based on a life cycle cost evaluation.

A diesel fuel tank will be provided to accommodate 72 hours of continuous operation in the event of an extended power outage. The generator will be provided with an automatic transfer switch for transfer within 10 seconds of egress lighting and critical loads. Another



transfer switch with a delay circuit will be provided for mechanical equipment. Inmate, egress and critical areas will also be provided with some battery pack lighting for safety in the event of a generator failure. The battery packs will illuminate the fixture for 1.5 hours. Door locks will be wired to cause the system to "fail secure."

Small Uninterruptible Power Supply (UPS) units will be located at all security and computer equipment stations. These units will provide at least 20 minutes of UPS power to the security system address panels, telephone switch, energy management system, computer, computer file servers and other critical loads. These UPS units will also be powered by emergency generator backed circuits providing a continuous power supply to this equipment.

■ Lighting Systems:

- Interior lighting for the facility will be primarily fluorescent. The fluorescent lighting will be 277 volt with energy saving lamps and electronic ballasts. Lighting fixtures in the cells and dorm areas will be maximum, medium or minimum (depending upon location) security vandal type with tamperproof hardware. Per the Board of Corrections Standards, general cell areas will be a minimum of 20 foot candle at desk area and personal grooming areas. Certain areas will have metal halide type lighting with metal halide fixtures with quartz restrike in the event of a power failure. Battery pack emergency lighting will be provided in critical areas to provide lighting in the event of primary and secondary power failure. Cell and dorm area lighting will be remotely controlled.

■ Lightning Protection System:

- The facility will include a functional system of grounds, conductors and air terminals for protection against damage by lightning.

■ Detention Equipment and Electronic Security Systems:

- The design follows a traditional jail facility with all functions under one roof.

The secure perimeter will be the building perimeter. A 12-foot high, chain link fence with 9 gauge fabric is proposed to surround the secure portion of the building complex. Razor wire will be provided at the base and top of the fence with a fence mounted detection/intrusion system (shaker type similar to that manufactured by Del Norte). The fence will have three vehicle openings. The vehicle sally port consists of an enclosed garage structure designed to accommodate five vehicles. Roll-up doors will be interlocked with the door to the building. The service yard will be separately enclosed with buildings on three sides and 12 foot fence on the fourth. A controlled gate will provide access under full control. A graveled perimeter road will parallel the fence. Security lighting of the perimeter as well as the compound will be provided.

Housing units and other secure locations will be hard construction using reinforced concrete or concrete masonry and concrete deck. Reinforcing will be in accordance with the Board of Corrections Standards. Control room, holding cells, visiting and intake areas will be of "hard" construction. Program, service and administrative areas will be of lighter weight materials in all non-inmate spaces.

Security hardware will be Folger-Adam type and will consist of a combination of manual and electromechanical locks. Remote release requirements of the building code will be met and all electric locks will be connected to the emergency generator. "Fifty Series" locks will be used at the segregation/isolation and maximum security cells. "One-Twenty Series"



locks will be used at minimum and medium security locations. Key override will be provided for electric locks.

Security doors and frames will be 14 and 12 gauge respectively, detention hollow metal similar to Trussbilt, Johnson or Habersham. For the most part, doors will be of the swinging type. Some motor operated, sliding door devices (rack and pinion type) will be provided at the sally ports. Glazing will be polycarbonate or glass clad polycarbonate in thickness appropriate to the location and anticipated threat and will be in conformance with the Board of Corrections Standards. Bullet resistant glazing will be provided at visitation and master control. Food passes, vision panels, shutters, speakeasies and paper/key passes will be provided where needed.

The master control room will monitor and control all access in and out of the facility including the vehicle sally ports, as well as monitor the perimeter fence detection system. An integrated electronic security system consisting of door control and status intercommunication and closed circuit television will be provided. Consoles will be of the graphic type. Master Control will have emergency egress control and override capability over all of the housing units. General population housing units will be designed for either direct or indirect supervision as indicated. Consoles for the housing units will be the graphic type and will control cell, pod and egress doors. A kill switch will be provided on these consoles to transfer control back to master control.

The closed circuit television system will generally utilize fixed focus, fixed location cameras and color monitors. CCTV will be used at vehicular and public entrances, sally ports and locations requiring monitoring such as program spaces and dayrooms. An intercom system will be provided throughout the facility. Intercom at door locations will activate the CCTV camera that monitors the door. An audio alert system will also be provided in the housing unit dayrooms and at other locations.

The card access system is designed to serve staff administration and support areas outside the secure perimeter. It will allow access to designated areas by personnel authorized to enter these areas. The system utilized will be Identipass, manufactured by Identocard and will use proximity readers. The system consists of the various devices at the controlled area to include the card reader, the electric locking mechanism and a device used to allow egress. These components interface to a reader interface device. The reader interface device incorporates processing capabilities, which allows the unit to make access determinations along with logging this information to the central processor unit. The central processing unit monitors and records the activity from the various reader interface units, annunciates any abnormal activity and uses graphic representations of the facility to pinpoint the origination and cause of the activity. The system logs the transactions on an activity printer along with archiving a file that may be used later for reporting and auditing purposes by the system administrator. Video badging will also be used for visual verification.

Telecommunications:

The telecommunications system will be designed to accommodate the Detention Center, plus capacity to be extended into future facility additions. The telecommunications infrastructure will consist of a fiber optic backbone in the Information Technology Center located near the Detention Center. In the Detention Center, it will tie into distribution panels inside the building located in the Telecommunications Room adjacent to the upper level of Central Control. From this point, the fiber optic cabling will distribute laterally through conduit runs in the first floor ceiling space to termination points serving various areas of the building. Empty capped conduit is to be run to exterior walls at points of

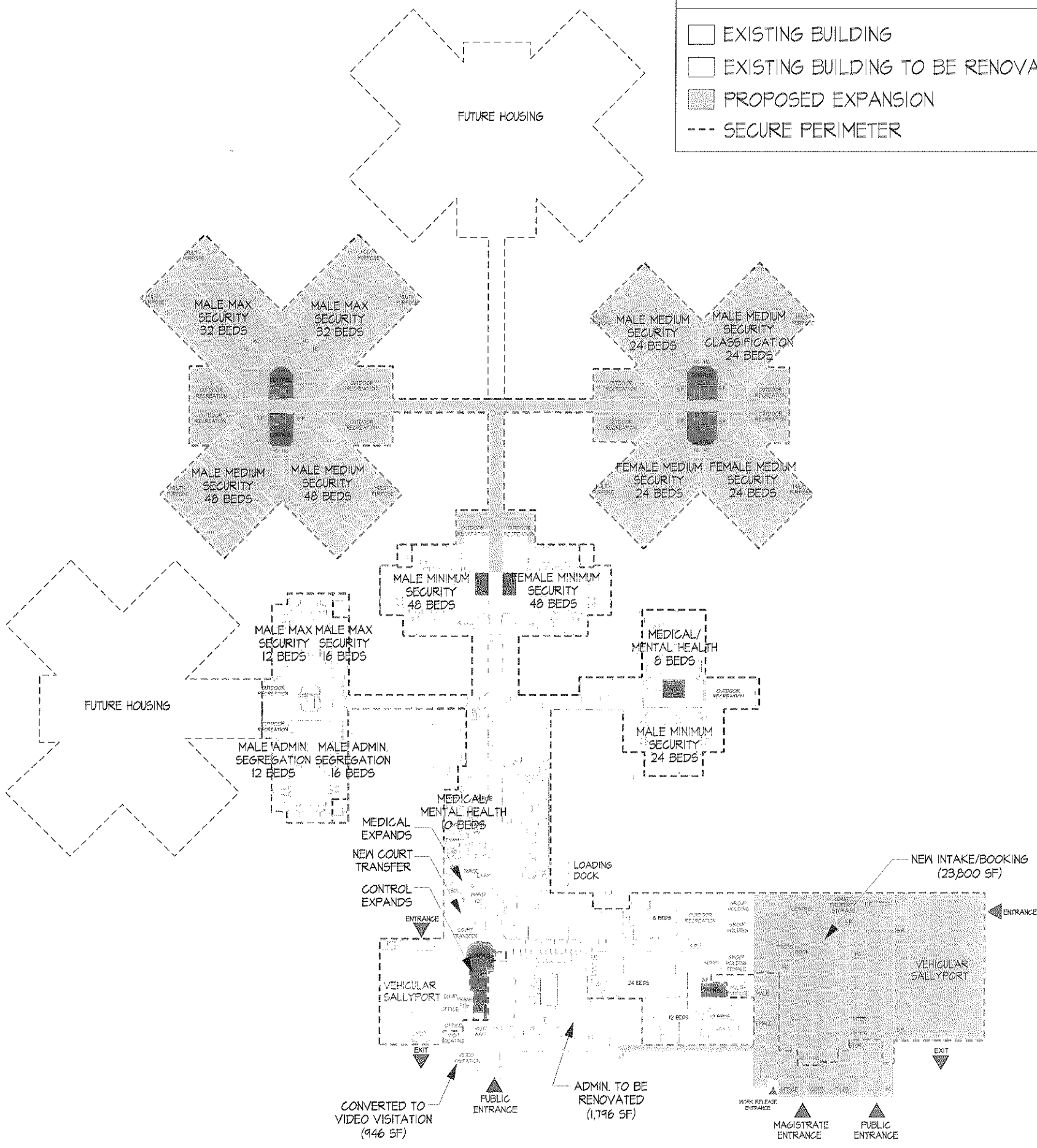
LEGEND

EXISTING BUILDING

EXISTING BUILDING TO BE RENOVATED

PROPOSED EXPANSION

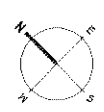
SECURE PERIMETER



EXPANSION FLOOR PLAN

GROUND LEVEL

SCALE: 1/32"=1'-0"



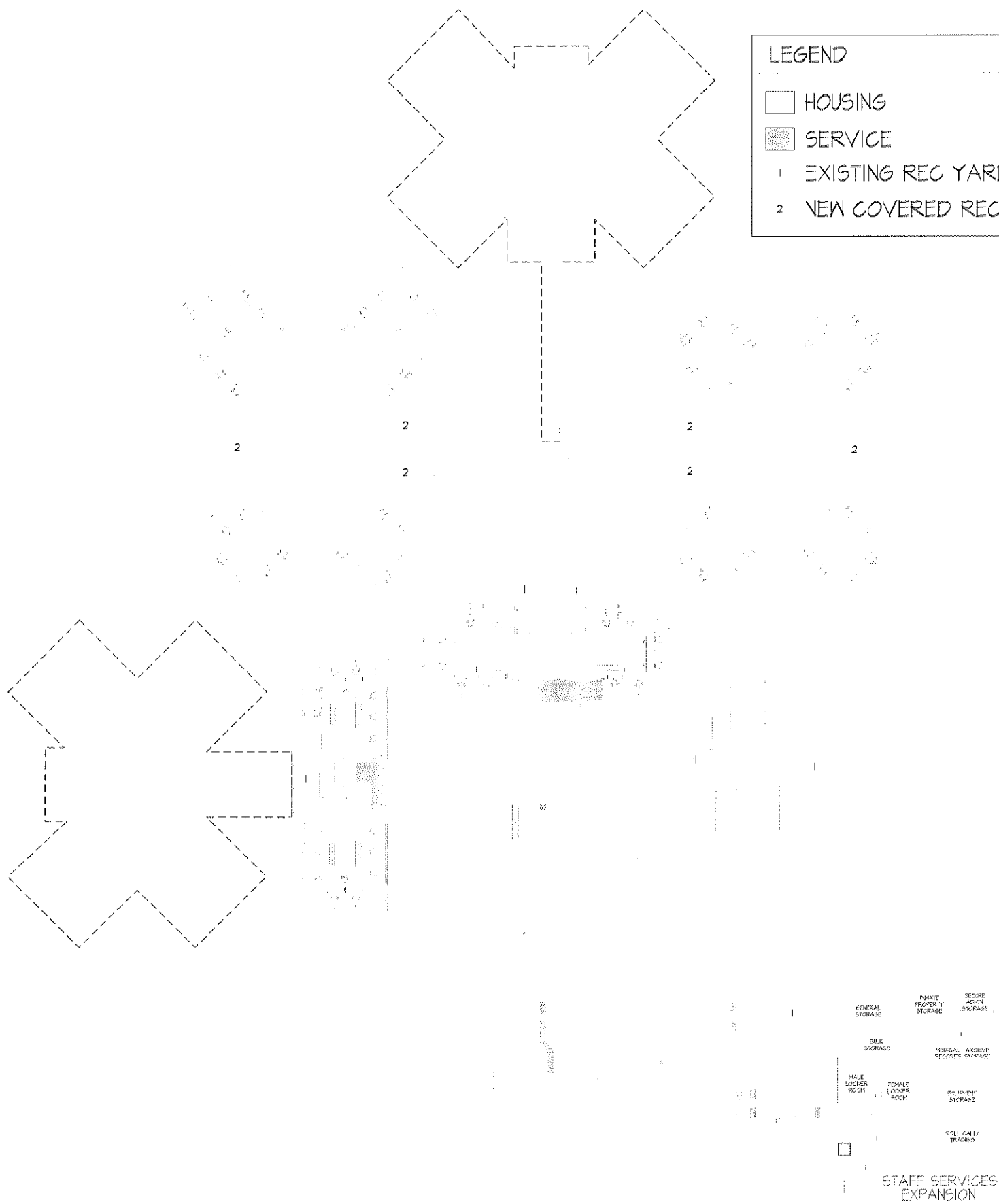
92 BEDS -MAXIMUM SECURITY HOUSING

192 BEDS -MEDIUM SECURITY HOUSING

176 BEDS -MINIMUM SECURITY HOUSING

460 BEDS -TOTAL

46 BEDS -SPECIAL NEEDS HOUSING



EXPANSION FLOOR PLAN
MEZZANINE LEVEL
SCALE: 1/32"=1'-0"



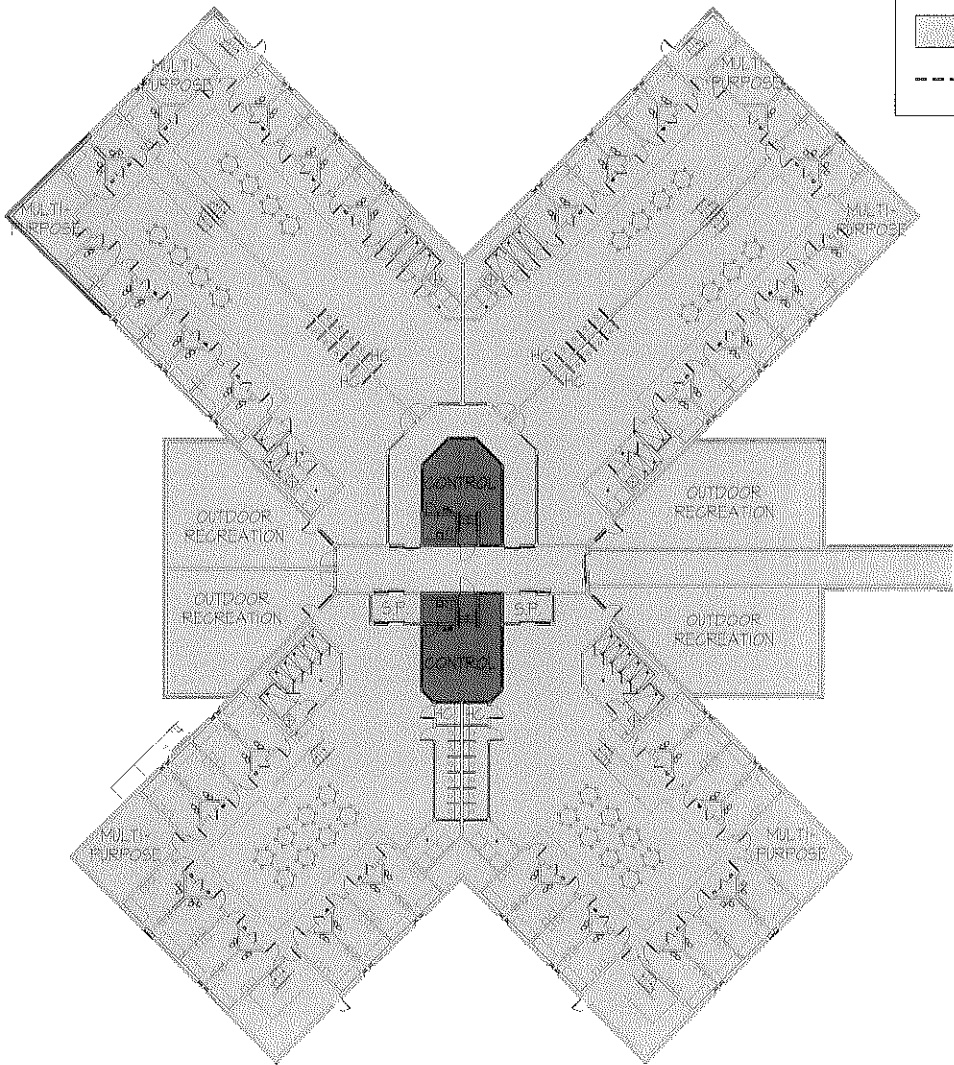
LEGEND

EXISTING BUILDING

EXISTING BUILDING TO BE RENOVATED

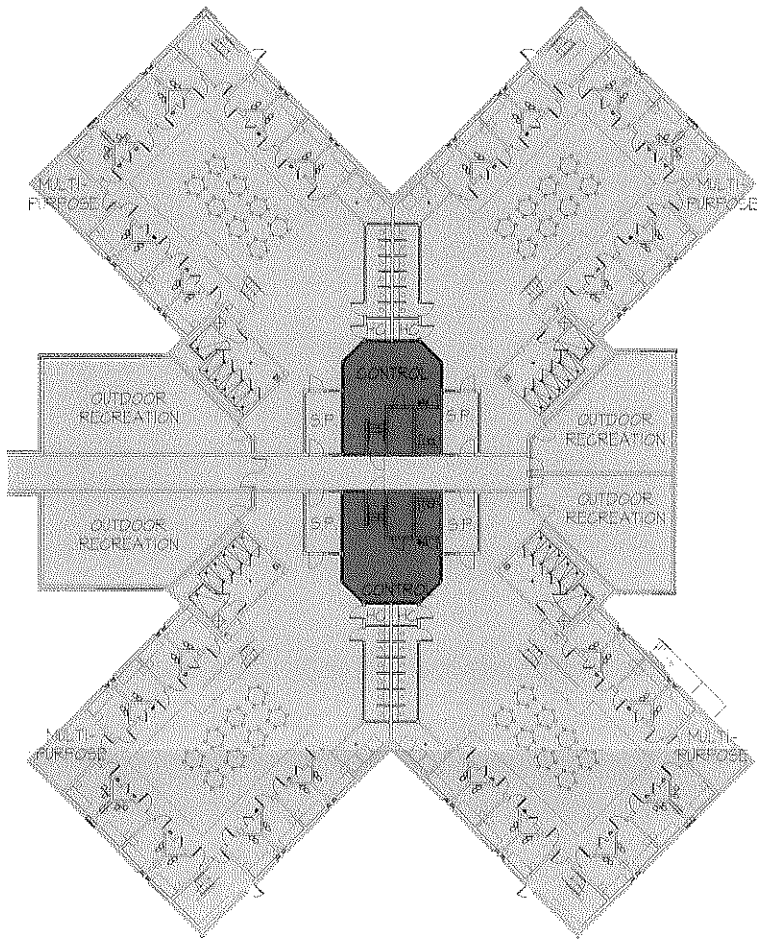
PROPOSED EXPANSION

SECURE PERIMETER



PARTIAL FLOOR PLAN
NEW MED/MAX SECURITY HOUSING POD

SCALE: 1/16"=1'-0"



PARTIAL FLOOR PLAN
NEW MEDIUM SECURITY HOUSING POD

SCALE: 1/16"=1'-0"



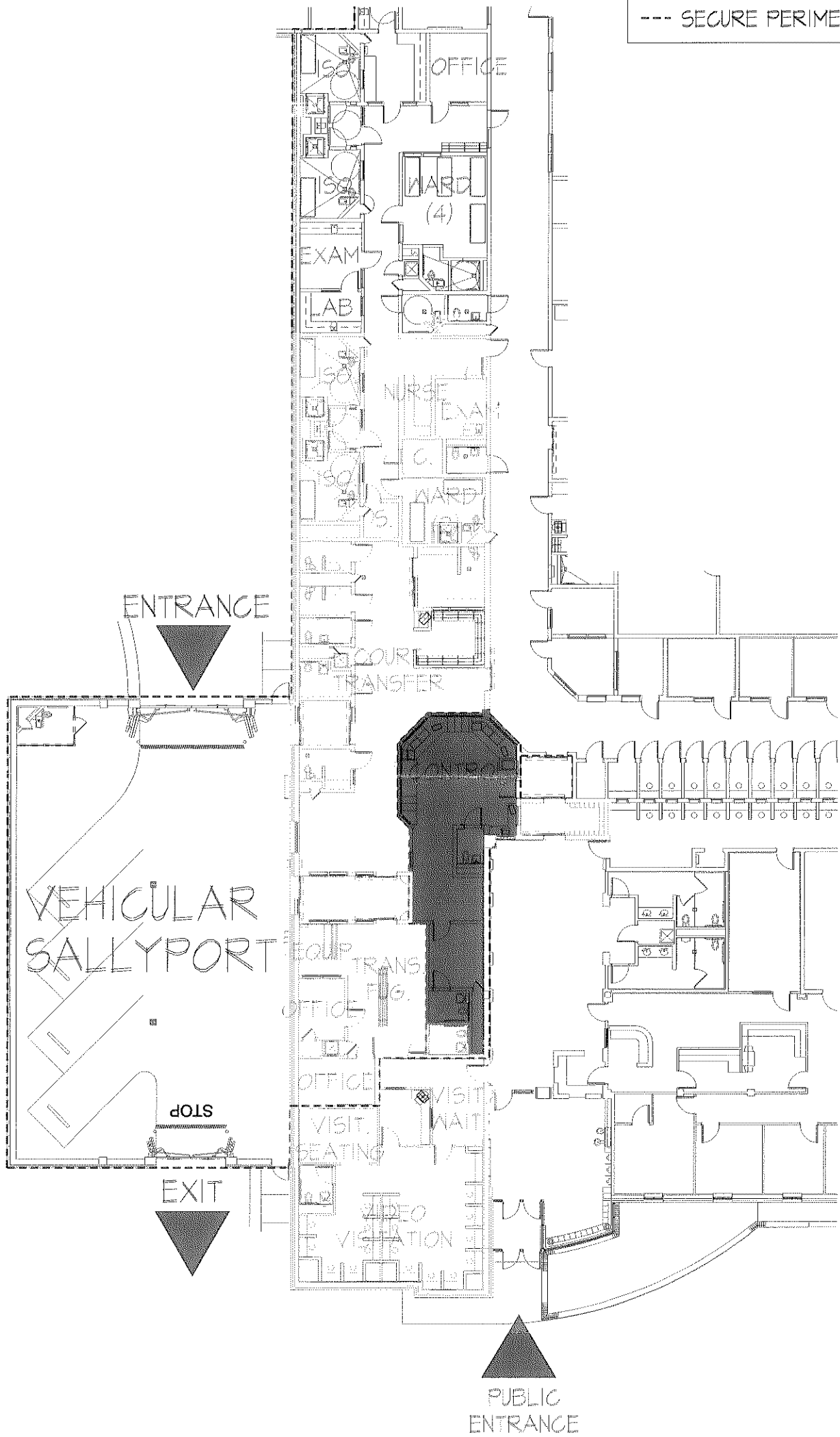
LEGEND

EXISTING BUILDING

EXISTING BUILDING TO BE RENOVATED

PROPOSED EXPANSION

SECURE PERIMETER



PARTIAL FLOOR PLAN
NEW MEDICAL & COURT TRANSFER AREA





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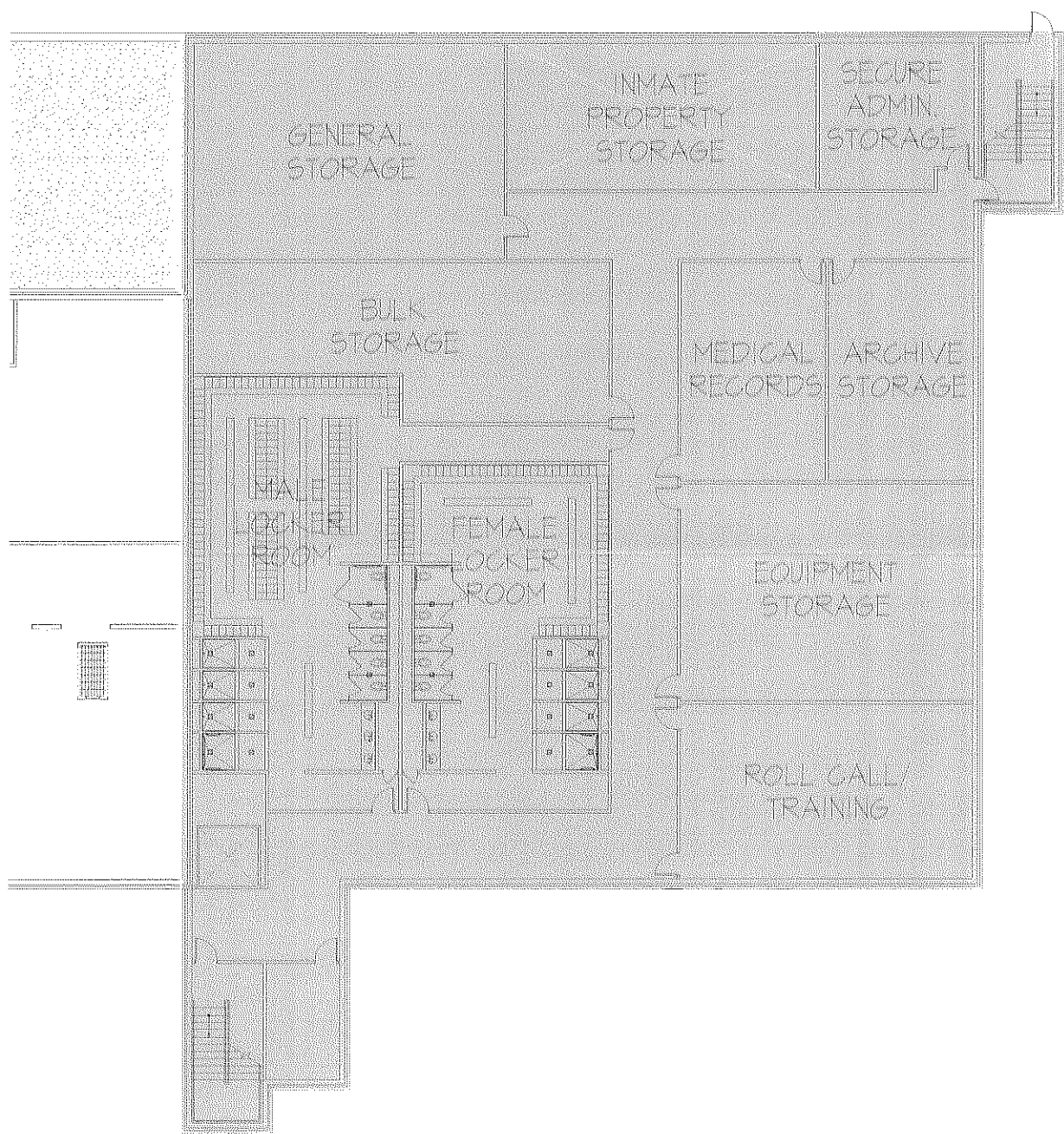
☐ EXISTING BUILDING
☐ EXISTING BUILDING TO BE RENOVATED
☒ PROPOSED EXPANSION
 --- SECURE PERIMETER



SEPTEMBER 30, 2005

PSA Dewberry
8101 ARLINGTON BOULEVARD
FAIRFAX, VA 22031-4606
703.698.9050 telephone
703.698.9049 fax

LEGEND	
	EXISTING BUILDING
	EXISTING BUILDING TO BE RENOVATED
	PROPOSED EXPANSION
	SECURE PERIMETER



PARTIAL FLOOR PLAN
 NEW STAFF SERVICES & STORAGE AREA
 SCALE: 1/8"=1'-0"



LOUDOUN COUNTY ADULT DETENTION CENTER

PLANNING STUDY

SEPTEMBER 30, 2005

PSA Dewberry
 8101 SPRINGSTONE BOULEVARD
 FALLS CHURCH, VA 22041-4600
 703.898.9050 telephone
 703.898.9049 fax



NOT RELEASABLE
UNDER VFOIA

SECTION 2:
PROJECT CHARACTERISTICS
a. Project Description

contact with future building additions. Fiber optic cabling between buildings will run underground with 4-inch PVC conduit and will include spare conduit to accommodate for any future requirements. As an alternative to pulling the fiber in conduit, fiber optic cable can be deployed using air pressure in microducts, which increases the utilization of conduit and provides more flexibility for future cabling and configuration changes.

Communications closets will serve as transition points between fiber optic cable and copper cable utilizing equipment racks, patch panels and the appropriate transmission equipment. The closets will also facilitate system testing and maintenance. Horizontal distribution will consist of category five (or latest tested transmission standard) copper cabling from the communications closet to the individual voice/data receptacles in each area. Each outlet location such as program, security control, administration or staff will have, as a minimum, two duplex RJ45 receptacles. All communications installations will comply with EIA/TIA standard 568A and all circuits will be tested for compliance.

Following are preliminary conceptual plans for the proposed project.



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SECTION 2:
PROJECT CHARACTERISTICS
f. Schedule

- f. Identify the proposed schedule for the work on the project, including sufficient time for the County's review and the estimated time for completion.

The proposed schedule for the project follows on the next page.

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SECTION 2:
PROJECT CHARACTERISTICS
j. Phasing

- j. Provide information relative to phased openings of the proposed project.

The sequence of construction will be phased to have the least possible impact upon the continuing operations of the existing facility.

In addition, it is important to note that the inmate housing expansion will be completed in total with no impact to the operation of the existing facility until tie-in is required, and the new booking area will be completed in a separate area from the existing booking area with no impact to the booking functions during construction.

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SECTION 3:
PROJECT FINANCING
a. Preliminary Estimate

- a. Provide a preliminary estimate and estimating methodology of the cost of the work by phase, segment or both.

LOUDOUN COUNTY DETENTION CENTER - PHASE II

Loudoun County's decisions on a variety of fit and finish issues (to be determined during design) will determine the final cost of the project. Following is a description of the services our team will provide during the preconstruction and construction phases of the project.

Preconstruction Services

Conceptual Design Phase:

- Define project budget and schedule
- Develop conceptual design with owner
- Owner/Architect review and approval

Schematic Design Phase:

- Bi-weekly meetings with Project Team (or as Owner requests)
- Analyze structural, mechanical and electrical systems
- Develop schematic budget and schedule (can be combined with DD phase)
- Owner/Architect review and approval

Design Development Phase:

- Monitor development of Design Development drawings and outline specifications:
 - Bi-weekly meetings with Project Team (or as owner requests)
 - Extensive value engineering input as required
 - Analyze structural, mechanical and electrical systems

Construction Documents Phase:

- Jointly develop list of qualified subcontractors/suppliers with Project Team
- Develop preliminary GMP based on 100% complete Design Development drawings with selected subcontractor input

Owner/Architect Review and Approval:

- Monitor development of Final Construction Documents and Outline Specifications
 - Bi-weekly meetings with Project Team (or as owner requests)
 - Provide continuing construction cost control estimates
- Develop final GMP when Construction Documents are 65% complete
 - 85%-90% of work is competitively bid by the pre-qualified subcontractors and suppliers
- Jointly select subcontractors/suppliers for each division of work with the Project Team
- Owner review and approval for the Project's design, GMP and schedule

Construction Phase Services

Final Design & Construction Phase:

- Identify and order long-lead equipment/material items
- Acquire necessary permits and approvals from governing agencies
- Start site work
- Start building foundations and superstructure while construction documents are being completed
- Monitor and control project costs, schedule, safety and quality through project completion to protect involved parties
- Final quotations from all remaining subcontractors and suppliers not previously awarded after drawings are 100% complete



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SECTION 3:
PROJECT FINANCING
b. Financing Plan

- b. Submit a plan for the development, financing and operation of the project showing the anticipated schedule on which funds will be required. Describe the anticipated costs of and proposed sources and uses for such funds, including any anticipated debt service costs. The operational plan should include appropriate staffing levels and associated costs based upon the County's adopted operational standards.

Should Loudoun County choose to have a third party finance this project, Shockey, LLC along with financial partner, Ferris, Baker Watts, Inc. can provide financing. While Ferris, Baker Watts, Inc. can act as underwriter, specific phases will not be determined until financial scenarios are finalized.

PROPOSED OPERATIONAL PLAN:

In Phase I of the Loudoun County Adult Detention Center, currently under construction, the two inmate housing pods are designed to be operated by direct supervision, meaning an officer is located at an open work station inside the housing area instead of in an enclosed control station.

This proposal for the Phase II expansion requires no addition direct supervision for inmate housing. Due to the amount of direct supervision that will already be provided in Phase I (44 percent of the total 220 beds in Phase I), this plan proposes that the beds added in Phase II be managed by indirect supervision, where an officer monitors the inmates from an enclosed, secure station.

There are currently 67 positions involved with detention operations in Loudoun County, including staff at both the existing Adult Detention center and the Work Release Center. It is currently estimated that an additional 26 positions will be needed to cover the new facility's (Phase I) posts and operations, for a total of 93 positions.

As established in the Planning Study to Expand the Adult Detention Center for the County (The Facility Group in association with PSA-Dewberry, 2005), it is estimated that the Phase II expansion will require an additional 18 positions to support the facility's additional housing units and larger facility operations. These positions include:

- 1 additional Captain for Security
- 2 additional 2nd Lieutenants to provide coverage, one per shift
- 12 additional Deputy Sheriffs to provide coverage for the three new inmate housing units, 24 hours per day, seven days per week
- 1 Deputy Sheriff for programs, video visitation and coverage for vacancies among the 12 housing deputies
- 1 Deputy Sheriff to serve as an additional Classification Deputy for the additional inmates
- 1 additional (civilian) Records Clerk, to assist with the records management for the additional inmates.

These additional positions will bring the expanded facility to a total of 111 staff.

Staffing Plan – Existing/New Jail (Phase I)/ Expansion Plan (Phase II)	
Existing Positions at the Old Jail	67
New Positions at the New Jail (Phase I)	26
Additional Positions (Phase II)	<u>18</u>
Total Positions at the Expanded ADC	111



Staffing Plan – Type of Position

Total Security Positions

Major	1
Captain	3
2 nd Lieutenant	5
Sergeant	11
Deputy Specialist	12
Deputy	<u>69</u>
	101

Total Non-Security Positions

Civilian P2	4
Civilian P1	4
Civilian G3	<u>2</u>
	10

Total Positions 111

OPERATING COSTS

In 2000, the Planning Study for the Loudoun County Adult Detention Center presented a six-year operating budget estimate, commencing in the year 2000. The budget estimate included:

- Staffing (salaries and benefits)
- Food Services
- Health Services
- General operating expenses and supplies
- Water and Sewer
- Utilities
- Maintenance
- Maintenance Reserve
- Contingency

The Planning Study estimated that the operating budget for the Loudoun County Adult Detention Center would be:

- \$6.4 million in 2003
- \$6.7 million in 2004
- \$7.0 million in 2005
- \$7.3 million in 2006
- \$7.7 million in 2007
- \$8.1 million in 2008



CURRENT SIX-YEAR OPERATING BUDGET

A six-year operating budget was estimated for the new Loudoun County Adult Detention Center beginning in FY 2007. The budget was developed as follows:

The new Adult Detention Center will be fully operational for FY 2007. Based on the current project schedule, the facility expansion will be operational the last half of FY 10.

The actual expenditures for FY 2004 were determined for the current Adult Detention Center and Work Release Facility. These expenditures were used to develop:

- The average annual cost per position in salaries and benefits
- The average annual cost per inmate in other direct costs

These average annual costs were escalated 3.5 percent per year for inflation and applied to:

- The anticipated number of staff positions
- The number of inmates to be held locally, based on the number of local jail beds available.

The overflow inmate population continues to be held out-of-county at the rate of \$35 per inmate per day (rate not increased for inflation). Out-of-county inmate housing (currently at Blue Ridge Regional Jail) would be discontinued in FY 10, upon completion of the expansion plan.

Membership in the Peumansend Creek Regional Jail will continue to provide 40 minimum security beds, at an annual rate of \$385,872 (rate not increased for inflation).

Revenue may be derived by leasing extra beds available following the completion of the expansion plan, before the County needs them based on growth. Revenue estimates are based on \$40 per inmate per day.

Based on these assumptions, it is estimated that the Loudoun County Adult Detention Center will have a projected annual operating budget of:

- \$10.1 million in FY 2007, the first year the new facility is opened (Phase I)
- \$10.8 million in FY 2008
- \$11.5 million in FY 2009
- \$13.0 million in FY 2010, with the Phase II expansion in operation for the second half of the FY
- \$13.1 million in FY 2011 (\$14.7 million in operating costs, minus \$1.6 million revenue from leased beds)
- \$13.9 million in FY 2012 (\$15.2 million in operating costs, minus \$1.3 million revenue from leased beds)

It should be noted that these figures do not include debt service payments on the construction of the new facility or its expansion.

The annual operating costs at the Loudoun County Adult Detention Center will be offset by three primary sources of revenue:

- Base salary and benefit contributions from the Virginia Compensation Board for eligible staff
- Per Diem reimbursements based on the number of inmates being held at the facility
- Leasing extra beds following the completion of the expansion plan, before the County grows into them.

Please note that all operational budget projections are only estimates. A variety of decisions by Loudoun County will impact the level of operational budget required. Shockey, LLC makes no guarantees as to the accuracy of the estimates contained herein.



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SECTION 3:
PROJECT FINANCING
c. Assumptions/Major Elements

- c. Include a list and discussion of assumptions underlying all major elements of the plan. Assumptions shall include all significant fees associated with financing given the recommended financing approach. In addition, complete disclosure of interest rate assumptions shall be included. Any ongoing operational fees, if applicable, shall also be disclosed, as well as any assumptions with regard to increases in such fees.

Should Loudoun County choose to discuss a third party financing option, the assumptions, and disclosure of rates will be discussed at that time.

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SECTION 3:
PROJECT FINANCING
d. Risk Factors

d. Identify the proposed risk factors and methods for dealing with these factors. Describe methods and remedies associated with any financial default.

The largest potential risk factor associated with this proposal is not truly a risk at all, but the novel nature of the PPEA program tends to make the process "feel" risky when in reality it is not.

To mitigate the risk of this alternative delivery method, Shockey, LLC has gone to great lengths to secure strong, experienced team members – members whose experience, financial stability and performance records complement the demands of a fast-track project delivery method such as this.

The team's approach will shave time off of the usual design-bid-build process typically used for correctional facilities, and the collaborative environment will contribute to the effectiveness of the team. Finger-pointing will not be tolerated, as all team members are working toward one common goal.

Present in any construction project (regardless of the acquisition method) is the risk of attaining the schedule, or lack thereof, and the potential for delay. Shockey's experience professional use state-of-the-art tracking and scheduling systems to control the progress of the work, and your project schedule.



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SECTION 3:
PROJECT FINANCING
e. Government Resources

- e. Identify any state, local or federal resources that the proposed contemplates requesting for the project along with an anticipated schedule of resource requirements. Describe the total commitment, if any, expected from governmental sources and the timing of any anticipated commitment, both on-time and on-going.

Aside from the standard review and approval of design by a variety of governmental entities, Shockey does not anticipate using governmental resources for the project.

However, Loudoun County must be in the position to "front" the State Department of Corrections reimbursement (thereby paying all Shockey requests for payment in full, in accordance with the terms of the Comprehensive Agreement) until the project is complete and the funds are released to Loudoun County.

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**SECTION 3:
PROJECT FINANCING**

f. General / Moral Obligation Backing

- f. Identify the need, if any, for the County to provide either its general obligation or moral obligation backing. The underlying assumptions should address this need and/or state that the credit would be via a "Service Agreement," for example. Any debt issuance should be expected to receive an investment grade rating from a nationally recognized bond rating agency. If the unenhanced rating is not investment grade, the County may require use of credit enhancements.

Should the County choose to have the Shockey team provide financing for this project, the notes will assume a rating of A1 from Moody's Investors Service and the interest rate will be based on the current market rate.

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SECTION 3:
PROJECT FINANCING
g. Interest Rate Impact

- g. Outline what impact, if any, a drop in interest rates would have on the ultimate annual project cost. Indicate if there is a method to refinance for cost savings. Indicate who would receive the benefit of any cost savings from refinancing. Would the savings go to the County, would the savings be shared and to what extent, or does the firm only receive benefit of this potential?

Should the County choose to have the Shockey team provide financing for this project, the financing component of this proposal will be based on the current market for tax-exempt debt instruments similar in credit quality and structure to those typically undertaken by the County. The interest rate environment fluctuates on a daily basis, and as such, the final interest rate will not be determined until the bonds are sold. This is an attractive time to issue fixed rate bonds, with interest rates at or near their historical lows. Based on the County's credit quality, there is little risk that such debt instruments would not be readily marketable. Our partner Ferris, Baker Watts, Inc. will work with the County's financial advisors to monitor interest rates and determine the optional structure of the financing to ensure that the County receives the lowest possible borrowing cost. FBW's experience in underwriting, selling and trading is extensive, and their strong capital base allows them to commit to purchase large blocks of bonds even when a significant balance is unsold. We are confident in our team's ability to deliver the most attractive and efficient building with the best financing structure at the lowest reasonable cost.



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SECTION 3:
PROJECT FINANCING
h. Financial Penalties

- h. Outline the financial penalties, if any, that would result should the County wish to terminate a project early or restructure the cash flows for some reason of its own choosing. The firm should be specific on this point.

If this project is not constructed following any phase of the job, the County shall reimburse the Contractor for all of the costs incurred by any member of the Shockey, LLC team through the date of termination plus a contractor's fee of 15% for the contractor's overhead and profit.

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SECTION 3:
PROJECT FINANCING
i. Underwriters

- i. If the firm has already chosen an underwriter, provide a breakout of the fees to any underwriting firm and the type of obligation the firm is using with a financing component...

Shockey LLC, along with its financial partner, Ferris, Baker Watts, Inc., can accommodate nearly any financial scenario that will help the County with its debt-structure. While Ferris, Baker Watts, Inc. can act as underwriter, specific phases will not be determined until financial scenarios are finalized.

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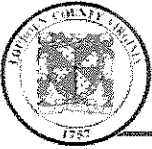
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SECTION 3:
PROJECT FINANCING
j. Terms & Conditions

j. Identify the amounts and terms and conditions for any revenue sources.

Our team does not foresee any direct revenue sources for Loudoun County as a result of this project. However, once the project is handed over to the County, they may determine that there are additional revenue streams.

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SECTION 3:
PROJECT FINANCING
k. Tax-Exempt Status

k. Identify any aspect of the project that could disqualify the project from obtaining tax-exempt financing.

We do not foresee any aspect of this project that would disqualify it from obtaining tax-exempt financing status as long as Loudoun County maintains ownership.

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SECTION 4: PROJECT BENEFIT & COMPATIBILITY

Contents of this tab can be found in Volume I.